5

10

## **ABSTRACT**

A method of testing a tire wherein a tire/wheel assembly (10), including the test tire (22) on which tire-related measurements are taken during multiple test runs. The pressure within the test tire (22) is maintained at a desired test pressure throughout the multiple test with a pressure-controlling device (20) mounted on the tire/wheel assembly (10). The pressure-controlling device (20) measures actual tire pressure, compares the measured tire pressure to the desired test pressure, and adjusts the tire pressure accordingly. Usually, there will be increase in tire pressure due to increased temperature during latter test runs whereby the adjustment can be performed by releasing fluid from the tire opening by, for example, opening a normally closed solenoid valve (48) to bleed air from the tire (22). The releasing step may be performed when the tire/wheel assembly (10) is at rest between test runs, in which case the pressure-controlling device (20) could include a motion detector.

G:\IP Dept\Patents (P)\1999 Series\99112\United States\9910112US.pat.wpd February 5, 2001